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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,648	11/04/2003	Naoya Ishikawa	953.1012	5367
21171	7590	03/29/2004	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			TRIEU, THAI BA	
			ART UNIT	PAPER NUMBER
			3748	

DATE MAILED: 03/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/699,648	<b>Applicant(s)</b> ISHIKAWA, NAOYA	
	<b>Examiner</b> Thai-Ba Trieu	<b>Art Unit</b> 3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 4 is/are rejected.
- 7) ☒ Claim(s) 3 and 5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

### DETAILED ACTION

The Preliminary Amendment filed on November 04, 2003, is acknowledged.  
Claims 4-5 were amended.

#### *Priority*

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

However, on January 09, 2004, applicant submitted the certified copy of prior foreign application -- **Japanese Patent Application No. 2002-332382--**, which did not match with the serial number of "***Prior Foreign Application No. JP 2002-332369***" claimed in the Declaration. Both of the Prior Foreign Applications were filed on the same day of November 15, 2002 (See attached copies of Submission of Certified of prior Foreign Application, Declaration, and a first page of Japanese Application).

#### ***Information Disclosure Statement***

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

### **Specification**

Since the Abstract contains two paragraphs, Applicant is required to submit a substitute abstract to meet requirement set forth below.

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally **limited to a single paragraph** on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

### **Claim Objections**

Claim 2 is objected to because of the following informalities:

- Line 6, "***based of***" should be replaced by -- ***based on*** --.

Appropriate correction is required.

### **Claim Rejections - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

***A person shall be entitled to a patent unless –***

***(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an***

*application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.*

***Claims 1-2 and 4 are rejected under 35 U.S.C. 102(e) as being anticipated by Arnold (Pub. Number US 2004/0050375 A1).***

Arnold discloses an EGR system for an internal combustion engine (12) with a turbocharger (44, 46), comprising a first EGR passage (via 24) for recirculating a part of the exhaust gas from the upstream side of a turbine (44) of the turbocharger to the downstream side of a compressor (46) of the turbocharger, wherein a second EGR passage (via 50, 54, 60, and 64) for recirculating a part of the exhaust gas from the downstream side of said turbine (44) to the upstream side of said compressor (46), a diesel particulate filter (52) arranged in EGR passage, a flow control means (22, 62) for controlling the exhaust gas in said first EGR passage (via 24) and said second EGR passage (via 50, 54, 60, and 64), and an EGR control means (Not shown) for controlling the flow control means based on data detected by an exhaust gas state monitoring means are provided (See Figure 1, Paragraphs from [0010] to [0013]; from [0017] to [0019]; and from [0024] to [0025]);

Wherein the flow control means being composed of the first EGR valve (22) arranged in said first EGR passage (the flow coming from line 20 to line 24) and the second EGR valve ((62) arranged in said second EGR passage (via 50, 54, 60, and 64), and the EGR control means (ECU) controls the exhaust gas flow by controlling said first EGR valve (22) and said second EGR valve (62) to be open/closed said exhaust gas state monitoring means being composed of an exhaust gas temperature sensor arranged in said exhaust passage, and the EGR

control means controls the exhaust gas flow by controlling said first EGR valve and said second EGR valve to be open/closed based on the exhaust gas temperature detected by the exhaust gas temperature sensor (See Paragraphs [0024] and [0025]; and

wherein said diesel particulate filter (52) is composed of a diesel particulate filter with an oxidation catalyst (See Paragraph [0018]).

Note that Arnold discloses the engine control unit (ECU) receives signal from one or more sensors monitoring one or more engine operating parameters, without limitation, such as quantity fuel flow, engine speed, turbine speed, compressor ratios, operating temperatures at one or more location, ambient or air temperature, and the like. Accordingly, the temperature sensor, being located in the exhaust passage, is implicitly disclosed in the Arnold reference. Arnold also discloses that the conditions of open/close of the first EGR valve and the second EGR valve depends on the low load or high load engine operations. From the low load and the high load engine operations, ECU determines the temperature of the exhaust gas coming out from the engine.

***Allowable Subject Matter***

Claims **3 and 5** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Arnold (Pub. Number US 2004/0050047 A1) discloses a low speed turbo EGR.
- Beck et al. (Pub. Number US 2004/0006978 A1) disclose an EGR control system and a method for an internal combustion engine.
- Nishiyama et al. (US Patent Number 6,681,564 B2) disclose an exhaust gas Denox apparatus for engine.
- Bailey (US Patent Number 6,526,753 B1) discloses an exhaust gas regenerator/particulate trap for an internal combustion engine.
- Khair (US Patent Number 6,474,060 B2) discloses an exhaust gas recirculation filtration system.
- Ceynow et al. (US Patent Number 5,440,880) disclose a diesel engine EGR system with exhaust gas conditioning.
- Takama (Patent Number JP 62113814 A) discloses a diesel engine exhaust gas-processing device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai-Ba Trieu whose telephone number is (703) 308-6450. The examiner can normally be reached on Monday - Thursday (6:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on (703) 308-2623. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TTB  
March 29, 2004



Thai-Ba Trieu  
Patent Examiner  
Art Unit 3748